UTAH CTE SKILL CERTIFICATION
PERFORMANCE EVALUATION
Test Number: 830 & 835 Test Name: Computer Programming II

(PRINT) Student's Name: _____ Date: _____

(PRINT) Teacher's Name: _____ School: _____

Teacher's Signature: _____ District: _____

The performance evaluation **is a required component of the skill certification process**. Each student must be evaluated on the required performance objectives below. Performance objectives should be completed during the term of the course. Students who achieve a 3 or 4 (moderately to highly skilled) on **ALL** performance objectives and 80% on the written test will be issued and ATE skill certification certificate.

INSTRUCTIONS:

- Students should be aware of their progress throughout the course, so that they can concentrate on the objectives that need improvement.
- Students should be encouraged to repeat the objectives until they have performed at a minimum of a number **3 or 4 on the rating scale (moderately to highly skilled level)**.

  4 = highly skilled Successfully demonstrated without supervision
  3 = moderately skilled Successfully demonstrated with limited supervision
  2 = limited skill Demonstrated with close supervision
  1 = not skilled Demonstration requires direct instruction and supervision
- When a performance objective has been achieved at a minimum of 80% (moderately to highly skilled level), **"Y" (Y=YES)** is recorded on the performance summary evaluation form. If a student does not achieve a 3 or a 4 (moderately to highly skilled level), then an **"N" (N=NO)** is recorded on the summary sheet for that objective.
- All performance objectives **MUST** be completed and evaluated prior to the written test.
- The teacher will bubble in **"A"** on the answer sheet for item **#81** for students who have achieved **"Y"** on **ALL performance objectives**.
- The teacher will bubble in **"B"** on the answer sheet for item **#81** for students who have **ONE or more "N's"** on the performance objectives.
- The signed evaluation sheet(s) **MUST** be kept in the teachers' file for two years.
- A copy is also kept on file with the school's ATE skills certification testing coordinator for two years.

Computer Programming II
Performance Objectives

Yes		No		
4	3	2	1	**Standard 1 - The student has developed applications which make advanced use of the skills and concepts developed in Computer Programming I.**
				● Developed advanced applications using input, calculations, output, IF structures, iteration, sub-programs, recursion, arrays, sorting and a database ● Developed advanced application projects ● Developed advanced applications using object-oriented programming
Yes		**No**		**Standard 2 - The student has used more efficient searching and sorting algorithms.**
4	**3**	**2**	**1**	
				● Demonstrated the ability to search data structures using binary and hash searches comparing the efficiency between sequential and binary searches. ● Demonstrated the ability to sort data structures using quadratic (n2) and binary (n log n) sorts comparing the efficiency between various sorts using BigO notation.
Yes		**No**		**Standard 3 - The student has implemented and manipulated a simple database.**
4	**3**	**2**	**1**	
				● Demonstrated the ability to use random access files in a program
Yes		**No**		**Standard 4 - The student has properly employed dynamic data structures and abstract data types (ADTs).**
4	**3**	**2**	**1**	
				● Demonstrated the ability to use linked lists, stacks, queues and binary trees
Yes		**No**		**Standard 5 - The student has designed and implemented classes using inheritance and composition.**
4	**3**	**2**	**1**	
				● Created user-defined inherited classes demonstrating overloading techniques
Yes		**No**		**Standard 6 - The student has developed an individual program of significant complexity and size (300-500 lines).**
4	**3**	**2**	**1**	
				● Created an individual program of significant complexity and size (300-500 lines). ● Compiled a portfolio of the individual and group programs developed during the course.
Yes		**No**		**Standard 7 - The student has participated in a work-based learning experience and/or competition.**
4	**3**	**2**	**1**	
				● Participated in a work-based learning experience such as a job shadow, internship, field trip to a software engineering firm or listened to an industry guest speaker and/or competed in a high school programming contest